Serial No. 10/734,169

REMARKS

I. STATUS OF THE CLAIMS

Claim 1 is amended.

New claims 4-6 are added and are similar, respectively, to claims 1-3, but, for example, include means-plus-function language.

New claim 7 is added, and is somewhat similar to the amended claim 1.

In view of the above, it is respectfully submitted that claims 1-7 are currently pending.

II. OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION

A Terminal Disclaimer is submitted herewith, to thereby overcome the rejection.

III. REJECTION OF CLAIM 1 UNDER 35 USC 103 AS BEING UNPATENTABLE OVER FRIEDRICH IN VIEW OF ITOU

Claim 1 is amended to recite that the computation unit **computes a noise light component** and determines whether the input signal light has been interrupted **based on the computed noise light component**, and then sends commands to the first optical amplifier and the second optical amplifier to perform shutdown control when the computation unit determines the input signal light has been interrupted.

It is respectfully submitted that neither Friedrich nor Itou discloses or suggest such features.

In view of the above, it is respectfully submitted that the rejection is overcome.

IV. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any further fees are required in connection with the filing of this response, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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